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W P E R L H (TM)

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MPSrch\_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Dec 23 10:12:52 1999; MasPar time 2.93 Seconds  
Tabular output not generated. 81.927 Million cell updates/sec

Title: >US-09-177-843-2  
Description: (1-6) from US09177843.pep  
Perfect Score: 41  
Sequence: 1 GRGESP 6

Scoring table: PAM 150  
Gap 15

Searched: 122810 seqs, 40068593 residues

Post-processing: Minimum Match 0%  
Listing first 45 summaries

Database: pir60  
1:pir1 2:pir2 3:pir3 4:pir4

Statistics: Mean 18.365; Variance 18.068; scale 1.016

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description	Pred. No.
1	41	100.0	625	2	A34615 profilaggrin - rat (f	2.82e+00
2	40	97.6	273	2	A28512 fibronectin - chicken	5.13e+00
3	40	97.6	1020	2	A29355 fibronectin - chicken	5.13e+00
4	40	97.6	2265	1	FNBO fibronectin - bovine	5.13e+00
5	40	97.6	2386	1	FNHU fibronectin precursor	5.13e+00
6	40	97.6	2477	2	S14428 fibronectin precursor	5.13e+00
7	40	97.6	2481	2	A43908 fibronectin - African	5.13e+00
8	39	95.1	316	2	F71338 probable ribose/galac	9.21e+00
9	39	95.1	425	2	S48459 probable membrane pro	9.21e+00
10	39	95.1	463	1	S74845 tldD homolog slr0863	9.21e+00
11	38	92.7	250	2	B35026 filaggrin B - mouse (	1.64e+01
12	38	92.7	254	2	A31488 filaggrin A - mouse (	1.64e+01
13	38	92.7	255	2	A35026 filaggrin precursor -	1.64e+01
14	38	92.7	313	2	A28444 hupK protein - Rhizob	1.64e+01
15	38	92.7	370	2	S27344 steroid 21-monooxygen	1.64e+01
16	38	92.7	492	2	A32525 hypothetical protein	1.64e+01
17	38	92.7	699	2	T01029 probable membrane pro	1.64e+01
18	38	92.7	953	2	S55156 hypothetical protein	1.64e+01
19	38	92.7	1095	2	T00329 SH2-containing inosit	1.64e+01
20	38	92.7	1189	2	JG6118 EPF autoantibody-reac	2.88e+01
21	37	90.2	72	2	A42856 DNA-binding protein 5	2.88e+01
22	37	90.2	825	2	JC4163 neural cell adhesion	2.88e+01
23	37	90.2	1265	2	A37967	2.88e+01

24 37 90.2 1272 2 S26180 neurofascin - chicken 2.88e+01  
25 36 87.8 64 2 S17384 T-cell receptor beta 5.02e+01  
26 36 87.8 165 1 S15194 ribosomal protein S10 5.02e+01  
27 36 87.8 181 2 A69540 conserved hypotheticala 5.02e+01  
28 36 87.8 235 2 B41326 nitrate hydratase (EC 5.02e+01  
29 36 87.8 248 2 S23449 NADH oxidase (H2O2-fo 5.02e+01  
30 36 87.8 490 2 A29782 unspecific monooxygen 5.02e+01  
31 36 87.8 551 2 T01832 hypothetical protein 5.02e+01  
32 36 87.8 657 2 S10001 Myd116 protein - mous 5.02e+01  
33 36 87.8 715 2 B70741 probable moey protein 5.02e+01  
34 36 87.8 831 2 S76235 hypothetical protein 5.02e+01  
35 36 87.8 831 2 A41819 proline-rich peptides 5.02e+01  
36 35 85.4 165 1 R3RT10 ribosomal protein S10 8.63e+01  
37 35 85.4 165 1 S95918 ribosomal protein S10 8.63e+01  
38 35 85.4 171 2 S15188 Xool protein - Africa 8.63e+01  
39 35 85.4 704 2 S50448 1,4-alpha-glucan bran 8.63e+01  
40 35 85.4 737 2 B70672 probable recG - Mycob 8.63e+01  
41 35 85.4 891 2 JC6519 DNA topoisomerase (EC 8.63e+01  
42 35 85.4 1134 1 A35955 meta-vinculin - human 8.63e+01  
43 35 85.4 1135 1 A29997 meta-vinculin - chick 8.63e+01  
44 35 85.4 1201 2 A35815 myosin heavy chain 1, 8.63e+01  
45 35 85.4 2385 2 A32491 myosin heavy chain 1, 8.63e+01

#### ALIGNMENTS

RESULT 1  
ENTRY A34615 #type fragment  
TITLE profilaggrin - rat (fragment)  
ORGANISM #formal\_name Rattus norvegicus #common\_name Norway rat  
DATE 29-Jun-1990 #sequence\_revision 09-Oct-1992 #text\_change 10-Sep-1997

ACCESSIONS A34615  
REFERENCE A34615  
#authors Haydock, P.V.; Dale, B.A.  
#journal DNA Cell Biol. (1990) 9:251-261  
#title Filaggrin, an intermediate filament-associated protein: structural and functional implications from the sequence of a cDNA from rat.

#cross-references MUID:90274870  
#accession A34615  
#status preliminary  
#molecule\_type mRNA  
#residues 1-625 #label HAY  
#cross-references GB:M21759; NID:g204143; PID:g204144  
#note the authors translated the codon GAA for residue 568 as Gln

KEYWORDS epidermis  
SUMMARY #length 625 #checksum 6240

Query Match 100.0%; Score 41; DB 2; Length 625;  
Best Local Similarity 100.0%; Pred. No. 2.82e+00;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 126 GRGESP 131  
QY 1 GRGESP 6

RESULT 2  
ENTRY A28512 #type fragment  
TITLE fibronectin - chicken (fragment)  
ORGANISM #formal\_name Gallus gallus #common\_name chicken  
DATE 31-Dec-1988 #sequence\_revision 31-Dec-1988 #text\_change 12-Feb-1999

ACCESSIONS A28512  
REFERENCE A28512  
#authors Kubomura, S.; Obara, M.; Karasaki, Y.; Taniguchi, H.; Gotoh, S.; Tsuda, T.; Higashi, K.; Ohsato, K.; Hirano, H.  
#journal Biochim. Biophys. Acta (1987) 910:171-181  
#title Genetic analysis of the cell binding domain region of the chicken fibronectin gene.  
#cross-references MUID:88050950

6-718

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110-148 #domain fibronectin type I repeat homology #label 1F3\
155-194 #domain fibronectin type I repeat homology #label 1F4\
200-239 #domain fibronectin type I repeat homology #label 1F5\
277-311 #domain collagen binding #label CBR\
329-370 #domain fibronectin type I repeat homology #label 1F6\
389-430 #domain fibronectin type II repeat homology #label 2F1\
439-477 #domain fibronectin type II repeat homology #label 2F2\
487-524 #domain fibronectin type I repeat homology #label 1F8\
530-568 #domain fibronectin type I repeat homology #label 1F9\
578-661 #domain fibronectin type III repeat homology #label
FN3A\
688-770 #domain fibronectin type III repeat homology #label
FN3B\
779-860 #domain fibronectin type III repeat homology #label
FN3C\
875-957 #domain fibronectin type III repeat homology #label
FN3D\
965-1046 #domain fibronectin type III repeat homology #label
FN3E\
1055-1134 #domain fibronectin type III repeat homology #label
FN3F\
1142-1227 #domain fibronectin type III repeat homology #label
FN3G\
1235-1318 #domain fibronectin type III repeat homology #label
FN3H\
1326-1404 #domain fibronectin type III repeat homology #label
GN3I\
1410-1517 #domain cell attachment #label CAD\
1416-1502 #domain fibronectin type III repeat homology #label
FN3J\
1493-1495 #region cell attachment (R-G-D) motif\
1510-1592 #domain fibronectin type III repeat homology #label
FN3K\
1600-1870 #domain heparin binding #label HB2\
1600-1682 #domain fibronectin type III repeat homology #label
FN3L\
1692-1773 #domain fibronectin type III repeat homology #label
FN3M\
1781-1863 #domain fibronectin type III repeat homology #label
FN3N\
1970-1972 #region cell attachment (R-G-D) motif\
1982-2062 #domain fibronectin type III repeat homology #label
FN3O\
1985-2216 #domain fibrin binding #label FB2\
2085-2124 #domain fibronectin type I repeat homology #label 1F10\
2130-2167 #domain fibronectin type I repeat homology #label 1F11\
2174-2209 #domain fibronectin type I repeat homology #label 1F12\
1 #modified_site pyrrolidone carboxylic acid (Gln) #status
experimental\
3 #cross-link isopeptide (Gln) (interchain to fibrin)
#status experimental\
21-47,45-56,66-94,
92-104,110-138,
136-148,155-184,
182-194,200-229,
227-239,277-304,
302-311,329-355,
343-370,389-415,
403-430,439-467,
465-477,487-514,
512-524,530-558,
556-568,2085-2114,
2112-2124,
2130-2157,
2155-2167,
2174-2206,
2198-2209
399,497,511,846,
976,1213,1987
1205.1692
#disulfide_bonds #status predicted\
#binding_site carbohydrate (Asn) (covalent) #status
experimental\
#binding_site carbohydrate (Asn) (covalent) #status
absent\

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1943,1944 #binding_site carbohydrate (Thr) (covalent) #status
experimental\
2246 #disulfide_bonds interchain (to 2250) #status predicted\
2250 #disulfide_bonds interchain (to 2246) #status predicted\
2263 #binding_site phosphate (Ser) (covalent) #status
experimental\
SUMMARY #length 2265 #molecular-weight 249556 #checksum 6613
Query Match 97.6%; Score 40; DB 1; Length 2265;
Best Local Similarity 83.3%; Pred. No. 5,13e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Db 1492 GRGESP 1497
|||||
Qy 1 GRGESP 6
RESULT 5 FNHU #type complete
ENTRY fibronectin precursor - human
TITLE fibronectin splice form ED-A
ALTERNATE_NAMES
ORGANISM #formal_name Homo sapiens #common_name man
DATE 27-Nov-1985 #sequence_revision 31-Mar-1993 #text_change
26-Feb-1999
ACCESSIONS A26460; A26284; S03917; A24854; A24476; A91008; A93529;
A21011; A90495; A22245; B22245; I65273; A21165; A92398;
S34791; A60904; A23901; A92386; A32517; S14357; A23891;
A03213; S10592
A26460
REFERENCE
#authors Dean, D.C.; Bowls, C.L.; Bourgeois, S.
#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84:1876-1880
#title Cloning and analysis of the promoter region of the human
fibronectin gene.
#cross-references MUID:87175578
#accession A26460
#molecule_type DNA
#residues 1-49 #label DEA
#cross-references GB:M15801; NID:g182686; PID:g553293
A26284
REFERENCE
#authors Oldberg, A.; Ruoslahti, E.
#journal J. Biol. Chem. (1986) 261:2113-2116
#title Evolution of the fibronectin gene.
#cross-references MUID:86111901
#accession A26284
#molecule_type DNA
#residues 1447-1540 #label OLD
#cross-references GB:M12549; NID:g182688
#note the authors translated the codon TTC for residue 1494 as
Glu
REFERENCE
S00848
#authors Paolella, G.; Henschliffe, C.; Sebastio, G.; Baralle, F.E.
#journal Nucleic Acids Res. (1988) 16:3545-3557
#title Sequence analysis and in vivo expression show that
alternative splicing of ED-B and ED-A regions of the human
fibronectin gene are independent events.
#cross-references MUID:88233940
#accession S03917
#molecule_type DNA
#residues 1594-1767, 'V', 1769-1783 #label PAO
#cross-references EMBL:X07718; NID:g31402
#note the authors translated the codon AAC for residue 1631 as
Asp
REFERENCE
A24854
#authors Vibe-Pedersen, K.; Magnusson, S.; Baralle, F.E.
#journal FEBS Lett. (1986) 207:287-291
#title Donor and acceptor splice signals within an exon of the human
fibronectin gene: a new type of differential splicing.
#cross-references MUID:87030929
#accession A24854
#molecule_type DNA
#residues 1992-2147 #label VIB
#cross-references GB:X04530; NID:g31436
A24476
REFERENCE

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#authors Gutman, A.; Yamada, K.M.; Kornblitt, A.  
#journal FEBS Lett. (1986) 207:145-148  
#title Human fibronectin is synthesized as a pre-propolypeptide.  
#cross-references MUID:87030890  
#accession A24476  
#status not compared with conceptual translation  
#molecule\_type mRNA  
#residues 1-14, 'Q', 16-38 #label GUT  
REFERENCE A91008  
#authors Kornblitt, A.R.; Umezawa, K.; Vibe-Pedersen, K.; Baralle, F.E.  
#journal EMBO J. (1985) 4:1755-1759  
#title Primary structure of human fibronectin: differential splicing may generate at least 10 polypeptides from a single gene.  
#cross-references MUID:85284965  
#accession A91008  
#status nucleic acid sequence not shown  
#molecule\_type mRNA  
#residues 32-1344, 1346-2080; 2112-2386 #label KOR  
#cross-references GB:X02761  
REFERENCE A93529  
#authors Kornblitt, A.R.; Vibe-Pedersen, K.; Baralle, F.E.  
#journal Nucleic Acids Res. (1984) 12:5853-5868  
#title Human fibronectin: cell specific alternative mRNA splicing generates polypeptide chains differing in the number of internal repeats.  
#cross-references MUID:84272258  
#accession A93529  
#molecule\_type mRNA  
#residues 973-2080; 2112-2386 #label KO2  
#cross-references GB:X00739  
REFERENCE A21011  
#authors Oldberg, A.; Linney, E.; Ruoslahti, E.  
#journal J. Biol. Chem. (1983) 258:10193-10196  
#title Molecular cloning and nucleotide sequence of a cDNA clone coding for the cell attachment domain in human fibronectin.  
#cross-references MUID:83290929  
#accession A21011  
#molecule\_type mRNA  
#residues 1434-1537 #label OL2  
#cross-references GB:K00055; NID:g182680; PID:g182683  
REFERENCE A90495  
#authors Bernard, M.P.; Kolbe, M.; Weil, D.; Chu, M.L.  
#journal Biochemistry (1985) 24:2698-2704  
#title Human cellular fibronectin: comparison of the carboxyl-terminal portion with rat identifies primary structural domains separated by hypervariable regions.  
#cross-references MUID:85280409  
#accession A90495  
#molecule\_type mRNA  
#residues 1594-2386 #label BER  
#cross-references GB:M10905; NID:g182696; PID:g182697  
REFERENCE A22245  
#authors Umezawa, K.; Kornblitt, A.R.; Baralle, F.E.  
#journal FEBS Lett. (1985) 186:31-34  
#title Isolation and characterization of cDNA clones for human liver fibronectin.  
#cross-references MUID:85231203  
#accession A22245  
#molecule\_type mRNA  
#residues 1948-2067 #label UME  
#cross-references GB:M27589; NID:g182705; PID:g182706  
#accession B22245  
#molecule\_type mRNA  
#residues 1975-1991; 2017-2039 #label UM2  
#cross-references GB:M27590  
REFERENCE A22394  
#authors Sekiguchi, K.; Klos, A.M.; Kurachi, K.; Yoshitake, S.; Hakomori, S.  
#journal Biochemistry (1986) 25:4936-4941  
#title Human liver fibronectin complementary DNAs: identification of two different messenger RNAs possibly encoding the alpha and beta subunits of plasma fibronectin.

#cross-references MUID:87026578  
#accession I65273  
#status preliminary; translated from GB/EMBL/DBJ  
#molecule\_type mRNA  
#residues 1978-1990, 2016-2018, 'N', 2020-2081, 2113-2127 #label SEK  
#cross-references GB:M14060; NID:g182701; PID:g182704  
REFERENCE A21165  
#authors Kornblitt, A.R.; Vibe-Pedersen, K.; Baralle, F.E.  
#journal Proc. Natl. Acad. Sci. U.S.A. (1983) 80:3218-3222  
#title Isolation and characterization of cDNA clones for human and bovine fibronectins.  
#cross-references MUID:83221567  
#accession A21165  
#molecule\_type mRNA  
#residues 2291-2386 #label KO3  
#cross-references GB:K00799; NID:g182681; PID:g182684  
REFERENCE A92398  
#authors Garcia-Pardo, A.; Pearlstein, E.; Frangione, B.  
#journal J. Biol. Chem. (1983) 258:12670-12674  
#title Primary structure of human plasma fibronectin.  
#cross-references MUID:84032463  
#accession A92398  
#molecule\_type protein  
#residues 32-47, 'C', 49-51, 'S', 53-72, 'A', 74-290 #label GAR1  
REFERENCE S34791  
#authors Garcia-Pardo, A.; Gold, L.I.  
#journal Arch. Biochem. Biophys. (1993) 304:181-188  
#title Further characterization of the binding of fibronectin to gelatin reveals the presence of different binding interactions.  
#accession S34791  
#molecule\_type protein  
#residues 291-300; 551-560 #label GAR2  
REFERENCE A60904  
#authors Griffin, C.A.; Calaycay, J.; Shively, J.E.; Smith, R.L.  
#journal Thromb. Res. (1986) 43:469-477  
#title Two plasma fibronectin fragments with different gelatin-binding properties.  
#cross-references MUID:87019725  
#accession A60904  
#molecule\_type protein  
#residues 293-301 #label GRI  
REFERENCE A23901  
#authors Calaycay, J.; Pande, H.; Lee, T.; Borsi, L.; Siri, A.; Shively, J.E.; Zardi, L.  
#journal J. Biol. Chem. (1985) 260:12136-12141  
#title Primary structure of a DNA- and heparin-binding domain (domain III) in human plasma fibronectin.  
#cross-references MUID:86008277  
#accession A23901  
#molecule\_type protein  
#residues 616-677, 'Q', 679-703, 'PT' #label CAL  
REFERENCE A92386  
#authors Pierschbacher, M.D.; Ruoslahti, E.; Sundelin, J.; Lind, P.; Peterson, P.A.  
#journal J. Biol. Chem. (1982) 257:9593-9597  
#title The cell attachment domain of fibronectin. Determination of the primary structure.  
#cross-references MUID:82265604  
#accession A92386  
#molecule\_type protein  
#residues 1441-1548 #label PIE  
#note residues 1524-1527 are responsible for the cell-binding activity  
REFERENCE A32517  
#authors Garcia-Pardo, A.; Rostagno, A.; Frangione, B.  
#journal Biochem. J. (1987) 241:923-928  
#title Primary structure of human plasma fibronectin. Characterization of a 38 kDa domain containing the C-terminal heparin-binding site (Hep III site) and a region of molecular heterogeneity.  
#cross-references MUID:87241275

Note: remainder of annotations omitted.

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Query Match      97.6%; Score 40; DB 1; Length 2386;
Best Local Similarity 83.3%; Pred. No. 5.13e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1523 GRGSP 1528
QY 1 GRGSP 6

RESULT 6
ENTRY S14428 #type complete
TITLE fibronectin precursor - rat
ORGANISM #formal_name Rattus norvegicus #common_name Norway rat
DATE 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 12-Feb-1999
ACCESSIONS S14428; S12455; A22319; S46203; S00459; A27252; I59049
REFERENCE S14428
#authors Hynes, R.O.
#submission submitted to the EMBL Data Library, July 1989
#accession S14428
##molecule_type mRNA
##residues 1-2477 #label HYN
##cross-references EMBL:X15906; NID:G56163; PID:G56164
REFERENCE S12455
#authors Schwarzbauer, J.E.; Patel, R.S.; Fonda, D.; Hynes, R.O.
#journal EMBO J. (1987) 6:2573-2580
#title Multiple sites of alternative splicing of the rat fibronectin gene transcript.
#cross-references MUID:88054951
#accession S12455
##status nucleic acid sequence not shown
##molecule_type mRNA
##residues 609-1810,'T',1812-2283 #label SCH
##cross-references EMBL:X15906
REFERENCE A22319
#authors Tamkun, J.W.; Schwarzbauer, J.E.; Hynes, R.O.
#journal Proc. Natl. Acad. Sci. U.S.A. (1984) 81:5140-5144
#title A single rat fibronectin gene generates three different mRNAs by alternative splicing of a complex exon.
#cross-references MUID:84298097
#accession A22319
##molecule_type DNA
##residues 2052-2237 #label TAM
REFERENCE S46203
#authors Falkenberg, C.; Enghild, J.J.; Thøgersen, I.B.; Salvesen, G.; Akerstrom, B.
#journal Biochem. J. (1994) 301:745-751
#title Isolation and characterization of fibronectin-alpha (1)-microglobulin complex in rat plasma.
#accession S46203
##status preliminary
##molecule_type protein
##residues 1193-1192;'GLN',1268,'P',1270-1271,'D',1273,'CF',1276,'PY';1385-1399 #label FAL
REFERENCE S00459
#authors Patel, R.S.; Odermatt, E.; Schwarzbauer, J.E.; Hynes, R.O.
#journal EMBO J. (1987) 6:2565-2572
#title Organization of the fibronectin gene provides evidence for exon shuffling during evolution.
#cross-references MUID:88054950
#accession S00459
##molecule_type DNA
##residues 1-139;2382-2477 #label PAT
##cross-references EMBL:X05831
##note the authors translated the codon CCT for residues 51 and 94 as Ala
REFERENCE A27252
#authors Schwarzbauer, J.E.; Tamkun, J.W.; Lemischka, I.R.; Hynes, R.O.
#journal Cell (1983) 35:421-431
#title Three different fibronectin mRNAs arise by alternative

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#cross-references MUID:84082067
#accession A27252
##molecule_type mRNA
##residues 1586-1720,'T',1722,1813-2477 #label SC2
REFERENCE I59049
#authors Odermatt, E.; Tamkun, J.W.; Hynes, R.O.
#journal Proc. Natl. Acad. Sci. U.S.A. (1985) 82:6571-6575
#title Repeating modular structure of the fibronectin gene: Relationship to protein structure and subunit variation.
#cross-references MUID:86016741
#accession I59049
##status translated from GB/EMBL/DBJ
##molecule_type DNA
##residues 1722-1810 #label RES
##cross-references GB:M11750; NID:G204164; PID:G554437
GENETICS 51/1; 94/1; 2416/3; 2454/3
CLASSIFICATION #superfamily fibronectin; fibronectin type I repeat homology; fibronectin type II repeat homology; fibronectin type III repeat homology
KEYWORDS alternative splicing; cell adhesion; collagen binding; disulfide bond; duplication; extracellular matrix; glycoprotein; heterodimer
FEATURE
1-32 #domain signal sequence #status predicted #label SIG\
33-2477 #product fibronectin #status predicted #label MAT\
53-88 #domain fibronectin type I repeat homology #label 1F1\
98-136 #domain fibronectin type I repeat homology #label 1F2\
142-180 #domain fibronectin type I repeat homology #label 1F3\
187-226 #domain fibronectin type I repeat homology #label 1F4\
232-271 #domain fibronectin type I repeat homology #label 1F5\
308-342 #domain fibronectin type I repeat homology #label 1F6\
360-401 #domain fibronectin type II repeat homology #label 2F1\
420-461 #domain fibronectin type II repeat homology #label 2F2\
470-508 #domain fibronectin type I repeat homology #label 1F7\
518-555 #domain fibronectin type I repeat homology #label 1F8\
561-599 #domain fibronectin type I repeat homology #label 1F9\
609-692 #domain fibronectin type III repeat homology #label FN3A\
718-800 #domain fibronectin type III repeat homology #label FN3B\
809-890 #domain fibronectin type III repeat homology #label FN3C\
905-987 #domain fibronectin type III repeat homology #label FN3D\
995-1076 #domain fibronectin type III repeat homology #label FN3E\
1085-1164 #domain fibronectin type III repeat homology #label FN3F\
1172-1257 #domain fibronectin type III repeat homology #label FN3G\
1265-1348 #domain fibronectin type III repeat homology #label FN3H\
1356-1439 #domain fibronectin type III repeat homology #label FN3I\
1447-1529 #domain fibronectin type III repeat homology #label FN3J\
1537-1619 #domain fibronectin type III repeat homology #label FN3K\
1614-1616 #region cell attachment (R-G-D) motif\
1631-1713 #domain fibronectin type III repeat homology #label FN3L\
1721-1803 #domain fibronectin type III repeat homology #label FN3M\
1811-1893 #domain fibronectin type III repeat homology #label FN3N\
1903-1984 #domain fibronectin type III repeat homology #label FN3O\
1992-2074 #domain fibronectin type III repeat homology #label FN3P\
2181-2183 #region, cell attachment (R-G-D) motif\
2193-2273 #domain fibronectin type III repeat homology #label

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FN3Q\
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#domain fibronectin type I repeat homology #label 1F11\
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2341-2378
2385-2420
53-79,77-88,98-126,
124-136,142-170,
168-180,187-216,
214-226,232-261,
259-271,308-335,
333-342,360-386,
374-401,420-446,
434-461,470-498,
496-508,518-545,
543-555,561-589,
587-599,2296-2325,
2323-2335,
2341-2368,
2366-2378,
2385-2411,
2409-2420
2458
2462
SUMMARY
#length 2477 #molecular-weight 272510 #checksum 3043

#disulfide_bonds #status predicted\
#disulfide_bonds interchain (to 2462) #status predicted\
#disulfide_bonds interchain (to 2458) #status predicted\
#length 2477 #molecular-weight 272510 #checksum 3043

Query Match 97.6%; Score 40; DB 2; Length 2477;
Best Local Similarity 83.3%; Pred. No. 5.13e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1613 GRGDSP 1618
|||||
Qy 1 GRGESP 6

RESULT 7
ENTRY A43908 #type complete
TITLE fibronectin - African clawed frog
ORGANISM #formal_name Xenopus laevis #common_name African clawed frog
DATE 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 12-Feb-1999
ACCESSIONS A43908
REFERENCE DesImone, D.W.; Norton, P.A.; Hynes, R.O.
#authors Dev. Biol. (1992) 149:357-369
#journal Identification and characterization of alternatively spliced
#title fibronectin mRNAs expressed in early Xenopus embryos.
#cross-references MUID:92111942
#accession A43908
#status nucleic acid sequence not shown; not compared with
conceptual translation
#molecule_type mRNA
#residues 1-2481 #label DES
#cross-references GB:M77820
#note sequence extracted from NCBI backbone (NCBIP:77473)
CLASSIFICATION #superfamily fibronectin; fibronectin type I repeat homology;
fibronectin type II repeat homology; fibronectin type III
repeat homology
duplication; extracellular matrix; glycoprotein; heterodimer

KEYWORDS
FEATURE
55-90 #domain fibronectin type I repeat homology #label 1F1\
100-138 #domain fibronectin type I repeat homology #label 1F2\
144-182 #domain fibronectin type I repeat homology #label 1F3\
189-228 #domain fibronectin type I repeat homology #label 1F4\
234-273 #domain fibronectin type I repeat homology #label 1F5\
309-343 #domain fibronectin type I repeat homology #label 1F6\
361-402 #domain fibronectin type II repeat homology #label 2F1\
421-462 #domain fibronectin type II repeat homology #label 2F2\
471-509 #domain fibronectin type I repeat homology #label 1F7\
519-556 #domain fibronectin type I repeat homology #label 1F8\
562-600 #domain fibronectin type I repeat homology #label 1F9\
610-693 #domain fibronectin type III repeat homology #label
FN3A\
719-801 #domain fibronectin type III repeat homology #label
FN3B\

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810-891 #domain fibronectin type III repeat homology #label
FN3C\
906-988 #domain fibronectin type III repeat homology #label
FN3D\
996-1077 #domain fibronectin type III repeat homology #label
FN3E\
1086-1165 #domain fibronectin type III repeat homology #label
FN3F\
1173-1258 #domain fibronectin type III repeat homology #label
FN3G\
1266-1349 #domain fibronectin type III repeat homology #label
FN3H\
1357-1440 #domain fibronectin type III repeat homology #label
FN3I\
1448-1530 #domain fibronectin type III repeat homology #label
FN3J\
1538-1620 #domain fibronectin type III repeat homology #label
FN3K\
1615-1617 #region cell attachment (R-G-D) motif\
1632-1714 #domain fibronectin type III repeat homology #label
FN3L\
1722-1804 #domain fibronectin type III repeat homology #label
FN3M\
1812-1894 #domain fibronectin type III repeat homology #label
FN3N\
1904-1985 #domain fibronectin type III repeat homology #label
FN3O\
1993-2075 #domain fibronectin type III repeat homology #label
FN3P\
2197-2277 #domain fibronectin type III repeat homology #label
FN3Q\
2301-2340 #domain fibronectin type I repeat homology #label 1F10\
2346-2383 #domain fibronectin type I repeat homology #label 1F11\
2390-2425 #domain fibronectin type I repeat homology #label 1F12\
55-81,79-90,
100-128,128-138,
144-172,170-182,
189-218,216-228,
234-263,261-273,
309-336,334-343,
361-387,375-402,
421-447,435-462,
471-499,497-509,
519-546,544-556,
562-590,588-600,
2301-2330,
2328-2340,
2346-2373,
2371-2383,
2390-2416,
2414-2425
2459
2463
SUMMARY
#length 2481 #molecular-weight 272716 #checksum 7955

#disulfide_bonds #status predicted\
#disulfide_bonds interchain (to 2463) #status predicted\
#disulfide_bonds interchain (to 2459) #status predicted\
#length 2481 #molecular-weight 272716 #checksum 7955

Query Match 97.6%; Score 40; DB 2; Length 2481;
Best Local Similarity 83.3%; Pred. No. 5.13e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1614 GRGDSP 1619
|||||
Qy 1 GRGESP 6

RESULT 8
ENTRY F71338 #type complete
TITLE probable ribose/galactose ABC transporter, permease protein
(rbsC-2) - syphilis spirochete
ORGANISM #formal_name Treponema pallidum subsp. pallidum #common_name
syphilis spirochete
DATE 24-Jul-1998 #sequence_revision 24-Jul-1998 #text_change
17-Mar-1999
ACCESSIONS F71338

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REFERENCE A71250
#authors Fraser, C.M.; Norris, S.J.; Weinstock, G.M.; White, O.;
Sutton, G.G.; Dodson, R.; Gwinn, M.; Hickey, E.K.; Clayton,
R.; Ketchum, K.A.; Sodergren, E.; Hardham, J.M.; McLeod,
M.P.; Salzberg, S.; Peterson, J.; Khalak, H.; Richardson,
D.; Howell, J.K.; Chidambaram, M.; Utterback, T.; McDonald,
L.; Attiach, P.; Bowman, C.; Cotton, M.D.; Fujii, C.;
Garland, S.; Hatch, B.; Horst, K.; Roberts, K.; Watthey,
L.; Weidman, J.; Smith, H.O.; Venter, J.C.
#journal Science (1998) 281:375-388
#title Complete genome sequence of Treponema pallidum, the syphilis
spirochete.
#cross-references MUID:98332770
#accession F71338
#status preliminary; nucleic acid sequence not shown;
translation not shown
##molecule_type DNA
#residues 1-316 #label COL
#cross-references GB:AE001212; GB:AE000520; NID:g3322597; PID:g3322600
#experimental_source strain Nichols
GENETICS
#gene TP0323
SUMMARY
#length 316 #molecular-weight 33824 #checksum 4213
Query Match 95.1%; Score 39; DB 2; Length 316;
Best Local Similarity 83.3%; Pred. No. 9.21e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Db 298 GRGESP 303
Qy 1 GRGESP 6
||||:|

RESULT 9
ENTRY S48469 #type complete
TITLE probable membrane protein Y1L103w - yeast (Saccharomyces
cerevisiae)
ORGANISM #formal_name Saccharomyces cerevisiae
DATE 02-Dec-1994 #sequence_revision 02-Dec-1994 #text_change
29-Jan-1999
ACCESSIONS S48469
REFERENCE S48455
#authors Bowman, S.; Churcher, C.
#submission submitted to the EMBL Data Library, September 1994
#accession S48469
##molecule_type DNA
#residues 1-425 #label BOW
#cross-references GB:247047; EMBL:Z38125; NID:g603997; PID:g763243;
MIFS:Y1L103w
GENETICS
#map_position 9L
CLASSIFICATION #superfamily Archaeoglobus fulgidus conserved hypothetical
protein AF1803
FEATURES
transmembrane protein
KEYWORDS
155-171 #domain transmembrane #status predicted #label TM1\
334-350 #domain transmembrane #status predicted #label TM2
SUMMARY
#length 425 #molecular-weight 48310 #checksum 8020
Query Match 95.1%; Score 39; DB 2; Length 425;
Best Local Similarity 83.3%; Pred. No. 9.21e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Db 415 GRGESP 420
Qy 1 GRGESP 6
||||:|

RESULT 10
ENTRY S74845 #type complete
TITLE t1dD homolog elr0863 - Synecocystis sp. (strain PCC 6803)
ORGANISM #formal_name Synecocystis sp.
#variety PCC 6803

REFERENCE A71250 #sequence_revision 29-Jan-1999 #text_change
01-Feb-1999
ACCESSIONS S74845
REFERENCE S74322
#authors Kaneko, T.; Sato, S.; Kotani, H.; Tanaka, A.; Asamizu, E.;
Nakamura, Y.; Miyajima, N.; Hirose, M.; Sugita, M.;
Sasamoto, S.; Kimura, T.; Hosouchi, T.; Matsuno, A.;
Muraki, A.; Nakazaki, N.; Naruo, K.; Okumura, S.; Shimp,
S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.;
Yasuda, M.; Tabata, S.
#journal DNA Res. (1996) 3:109-136
#title Sequence analysis of the genome of the unicellular
cyanobacterium Synecocystis sp. PCC6803. II. Sequence
determination of the entire genome and assignment of
potential protein-coding regions.
#cross-references MUID:97061201
#accession S74845
##molecule_type DNA
#residues 1-463 #label KAN
#cross-references EMBL:D90909; GB:AB001339; NID:gl652844; PID:d1018539;
PID:gl652888
##note the nucleotide sequence was submitted to the EMBL Data
Library, June 1996
CLASSIFICATION #superfamily Escherichia coli t1dD protein
SUMMARY
#length 463 #molecular-weight 50369 #checksum 5364
Query Match 95.1%; Score 39; DB 1; Length 463;
Best Local Similarity 83.3%; Pred. No. 9.21e+00;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Db 352 GRGESP 357
Qy 1 GRGESP 6
||||:|

RESULT 11
ENTRY B35026 #type fragment
TITLE filaggrin B - mouse (fragment)
ORGANISM #formal_name Mus musculus #common_name house mouse
DATE 20-Jul-1990 #sequence_revision 06-Nov-1992 #text_change
10-Sep-1997
ACCESSIONS B35026
REFERENCE A35026
#authors Rothnagel, J.A.; Steinert, P.M.
#journal J. Biol. Chem. (1990) 265:1862-1865
#title The structure of the gene for mouse filaggrin and a
comparison of the repeating units.
#cross-references MUID:90130423
#accession B35026
##status preliminary
##molecule_type DNA
#residues 1-250 #label ROT
#cross-references GB:M32301; NID:gl93311; PID:gl93312; GB:J05198
##note the authors translated the codon TCC for residue 159 as
Pro, GGC for residue 195 as Val, and CAA for residue
216 as His
KEYWORDS
epidermis
SUMMARY
#length 250 #checksum 8283
Query Match 92.7%; Score 38; DB 2; Length 250;
Best Local Similarity 83.3%; Pred. No. 1.64e+01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Db 186 GRGOSP 191
Qy 1 GRGESP 6
||||:|

RESULT 12
ENTRY A31488 #type complete
TITLE filaggrin - mouse
ORGANISM #formal_name Mus musculus #common_name house mouse
DATE 20-Jul-1989 #sequence_revision 20-Jul-1989 #text_change

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cross